AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A satellite, in particular a telecommunication satellite, intended to be placed in a geostationary orbit, and comprising a structure having a north face and a south face oriented perpendicularly to the rotation axis of the Earth and an east face and a west face that are periodically exposed to solar radiation as the satellite orbits the Earth, said structure supporting equipment dissipating heat, the north, south, east and west faces ~~constituting~~ comprising radiator panels that radiate into space heat dissipated by the equipment, and said satellite comprising at least one shelf to support said equipment and heat transfer means for transferring heat dissipated by said equipment to said north, south, east and west radiator panels;~~,~~

wherein said heat transfer means comprises at least one capillary pumped two-phase fluid loop; and

wherein said fluid loop comprises at least one evaporator having an inlet and an outlet for a heat exchange fluid thermally connected to said equipment supported by said shelf, and four heat exchange fluid circulation branches each having one end connected to said inlet and one end connected to said outlet of said at least one evaporator, one of said heat exchange fluid circulation branches associated with each of said north, south, east and west faces, and each branch comprising a heat exchange fluid condenser thermally connected to the face with which said branch is associated.

2. - 3. (canceled).

4. (currently amended): The satellite claimed in claim 1~~3~~ wherein each heat exchange fluid circulation branch further comprises an isolator at the outlet of its condenser to block uncondensed vapor.

5. (original): The satellite claimed in claim 1 wherein said shelf is parallel to a face of said structure facing the Earth.

6. (currently amended): The satellite claimed in claim 1~~2~~ comprising a plurality of shelves for supporting equipment and a fluid loop for each shelf.

7. (new): A satellite comprising:

a satellite body supporting equipment;

at least four sides of the satellite body comprising radiator panels;

a capillary pumped two-phase fluid loop comprising an evaporator thermally connected to the equipment and a fluid circulation branch associated with each of the radiator panels;

wherein each branch is connected to an inlet and an outlet of the evaporator and comprises a condenser thermally connected to the radiator panel associated with the branch.

8. (new): The satellite of claim 7, wherein the fluid loop comprises a plurality of evaporators and each branch is connected to the inlets and the outlets of the plurality of evaporators.

9. (new): The satellite of claim 7, wherein the satellite body comprises six sides; the six sides comprise north, south, east, west, earth and anti-earth faces; and the north, south, east and west faces comprise the radiator panels.

10. (new): The satellite of claim 7, wherein each of the branches further comprises an isolator at the outlet of the condenser.

11. (new): The satellite of claim 7, wherein the satellite body further comprises a shelf and the shelf supports the equipment.

12. (new): The satellite of claim 11, wherein one of the sides of the satellite body faces the Earth and the shelf is parallel to the side facing the Earth.

13. (new): The satellite of claim 7, wherein the satellite body further comprises a plurality of shelves supporting the equipment and a fluid loop for each shelf.

14. (new): The satellite of claim 7, wherein the satellite is a telecommunication satellite placed in a geostationary orbit.

15. (new): A satellite comprising:

a satellite body with six sides, the satellite body supporting equipment;

at least four of the sides comprising heat radiators that radiate heat into space;

a fluid heat exchanger that transfers heat from the equipment to the heat radiator;

wherein the fluid heat exchanger comprises an evaporator for evaporating a fluid, the evaporator being thermally connected to the equipment, and further comprising at least one fluid circulation branch that circulates the fluid, associated with each of the heat radiators.

16. (new): The satellite of claim 15, wherein each branch is connected to an inlet and an outlet of the evaporator and comprises a condenser that condenses the liquid, the condenser of each branch being thermally connected to the radiator panel associated with the branch.

17. (new): The satellite of claim 15, wherein the satellite body comprises six sides; the six sides comprise north, south, east, west, earth and anti-earth faces; and the north, south, east and west faces each comprises one of the heat radiators.

18. (new): The satellite of claim 15, wherein each of the branches further comprises an isolator at the outlet of the condenser that blocks vapor that has not been fully condensed.

19. (new): The satellite of claim 15, wherein the satellite is a telecommunication satellite placed in a geostationary orbit.

20. (new): A satellite comprising:

a satellite body with six sides, the satellite body supporting equipment;

at least four of the sides comprising first means for radiating heat into space;

a second means for transferring heat from the equipment to the first means;

wherein the second means comprises third means for evaporating a fluid, the third means being thermally connected to the equipment, and further comprising at least one fluid circulation branch that circulates the fluid, associated with each of the four sides comprising the first means.